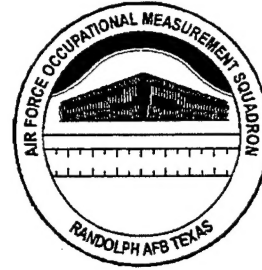
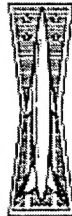




**UNITED STATES
AIR FORCE**



OCCUPATIONAL SURVEY REPORT



**MISSILE AND SPACE FACILITIES
AFSC 2M0X3/A**

OSSN: 2324

FEBRUARY 1999

**OCCUPATIONAL ANALYSIS PROGRAM
AIR FORCE OCCUPATIONAL MEASUREMENT SQUADRON
AIR EDUCATION and TRAINING COMMAND
1550 5th STREET EAST
RANDOLPH AFB, TEXAS 78150-4449**

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

19990331 113

DISTRIBUTION FOR AFSC 2M0X3/A OSR

	<u>OSR</u>	<u>ANL EXT</u>	<u>TNG EXT</u>	<u>JOB INV</u>
AFOMS/OMDQ	1			
AFOMS/OMYXL	10		5	10
AL/HRMM	2			
ARMY OCCUPATIONAL SURVEY BRANCH	1			
CCAF/AYX	1			
DEFENSE TECHNICAL INFORMATION CENTER	2			
HQ AETC/DPPEE	3		3	
HQ AFPC/DPAAD5	1			
HQ AFPC/DPPAC	1			
HQ AFSPC/DPAE	3		3	
HQ USAF/ILMW	1		1	
HQ USMC/STANDARDS BRANCH	1			
NAVMAC	1			
USAFMS/DTMP	1		1	1
532 TRS/DOS (597 7TH STREET, SUITE 104, VANDENBERG AFB, CA 93437-5305, ATTN: SMSGT LAFFERTY)	5	1	5	2

TABLE OF CONTENTS

	<u>PAGE NUMBER</u>
PREFACE	vii
SUMMARY OF RESULTS	ix
INTRODUCTION	1
Background.....	1
SURVEY METHODOLOGY	2
Inventory Development.....	2
Survey Administration	2
Survey Sample.....	3
Task Factor Administration.....	4
SPECIALTY JOBS	5
Overview of Specialty Jobs.....	5
Group Descriptions.....	6
ANALYSIS OF DAFSC GROUPS	15
Skill-Level Descriptions.....	15
Summary.....	16
TRAINING ANALYSIS	24
First-Enlistment Personnel	24
Training Emphasis (TE) and Task Difficulty (TD) Data	29
Specialty Training Standard (STS).....	32
JOB SATISFACTION ANALYSIS	35
IMPLICATIONS.....	39

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS
(Tables, Figures, Appendices)

	<u>PAGE NUMBER</u>
TABLE 1 COMMAND DISTRIBUTION OF AFSC 2M0X3/A PERSONNEL	3
TABLE 2 PAYGRADE DISTRIBUTION OF SURVEY SAMPLE	3
TABLE 3 RELATIVE PERCENT TIME SPENT ON DUTIES BY SPECIALTY JOBS	12
TABLE 4 SELECTED BACKGROUND DATA FOR SPECIALTY JOBS	13
TABLE 5 SPECIALTY JOB COMPARISON BETWEEN CURRENT AND..... 1996 SURVEYS	14
TABLE 6 DISTRIBUTION OF DAFSC GROUP MEMBERS ACROSS SPECIALTY	17
JOBS (PERCENT RESPONDING)	
TABLE 7 RELATIVE PERCENT TIME SPENT ON DUTIES BY DAFSC GROUPS.....	18
TABLE 8 REPRESENTATIVE TASKS PERFORMED BY 2M033A PERSONNEL.....	19
TABLE 9 REPRESENTATIVE TASKS PERFORMED BY 2M053 PERSONNEL.....	20
TABLE 10 TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSCs 2M033A	21
AND 2M053 PERSONNEL (PERCENT MEMBERS PERFORMING)	
TABLE 11 REPRESENTATIVE TASKS PERFORMED BY 2M073 PERSONNEL.....	22
TABLE 12 TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSCs 2M053	23
AND 2M073 PERSONNEL (PERCENT MEMBERS PERFORMING)	
TABLE 13 RELATIVE PERCENT TIME SPENT ON DUTIES BY FIRST-ENLISTMENT	26
PERSONNEL (N=73)	
TABLE 14 REPRESENTATIVE TASKS PERFORMED BY AFSC 2M0X3/A FIRST-.....	27
ENLISTMENT PERSONNEL (N=73)	
TABLE 15 EQUIPMENT USED BY ACTIVE DUTY FIRST-ENLISTMENT	28
AFSC 2M0X3/A PERSONNEL	
TABLE 16 TASKS RATED HIGHEST IN TRAINING EMPHASIS.....	30
TABLE 17 TASKS RATED HIGHEST IN TASK DIFFICULTY	31

TABLE OF CONTENTS (CONTINUED)
(Tables, Figures, Appendices)

	PAGE NUMBER
TABLE 18 EXAMPLES OF TECHNICAL TASKS PERFORMED BY AFSC 2M0X3/A.....	33
GROUP MEMBERS SUGGESTED FOR PROFICIENCY CODE REVIEW TO PERFORMANCE CODING (PERCENT MEMBERS PERFORMING)	
TABLE 19 EXAMPLES OF TECHNICAL TASKS PERFORMED BY 20 PERCENT	34
OR MORE GROUP MEMBERS AND NOT REFERENCED TO THE STS	
TABLE 20 COMPARISON OF JOB SATISFACTION INDICATORS BY TAFMS GROUPS ...	36
(PERCENT MEMBERS RESPONDING)	
TABLE 21 COMPARISON OF CURRENT SURVEY AND PREVIOUS SURVEY	37
BY TAFMS GROUPS (PERCENT MEMBERS RESPONDING)	
TABLE 22 COMPARISON OF JOB SATISFACTION INDICATORS BY SPECIALTY	38
JOBS (PERCENT MEMBERS RESPONDING)	
FIGURE 1 AFSC 2M0X3/A CAREER LADDER SPECIALTY JOBS (N=328).....	7
FIGURE 2 DISTRIBUTION OF 2M0X3/A FIRST-ENLISTMENT PERSONNEL.....	25
ACROSS SPECIALTY JOBS (N=73)	
APPENDIX A SELECTED REPRESENTATIVE TASKS PERFORMED BY SPECIALTY	41
JOB GROUPS	

PREFACE

This report presents the results of an Air Force Occupational Survey of the Missile and Space Facilities career ladder, Air Force Specialty Code (AFSC) 2M0X3/A. Authority for conducting occupational surveys is contained in AFI 36-2623. Computer products used in this report are available for use by operations and training officials.

The survey instrument was developed by 2Lt Christopher Gilliam. Computer programming support was provided by Ms. Karen B. Tilghman. Mr. Robert E. Boerstler analyzed the data and wrote the final report. This report has been reviewed and approved by Lt Col Roger W. Barnes, Chief, Airman Analysis Section, Occupational Analysis Flight, Air Force Occupational Measurement Squadron (AFOMS).

Copies of this report are distributed to Air Staff sections, major commands, and other interested training and management personnel. Additional copies are available upon request to AFOMS/OMYXI, 1550 5th Street East, Randolph Air Force Base, Texas 78150-4449, or by calling DSN 487-5543. For information on the Air Force occupational survey process or other on-going projects, visit our web site at <http://www.omsq.af.mil>.

GEORGE KAILIWAI III, Lt Col, USAF
Commander
Air Force Occupational Measurement Sq

JOSEPH S. TARTELL
Chief, Occupational Analysis Flight
Air Force Occupational Measurement Sq

THIS PAGE INTENTIONALLY LEFT BLANK

SUMMARY OF RESULTS

1. **Survey Coverage:** The Missile and Space Facilities career ladder was surveyed to provide current job and task data for use in updating career ladder documents and training programs. Survey results are based on responses from 328 members accounting for 61 percent of the total population surveyed.
2. **Specialty Jobs:** Four jobs and three clusters were identified in the career ladder structure analysis. The Facilities Maintenance Cluster, PREL Job and the Maintenance Controller Job are totally oriented toward technical task performance and account for 73 percent of the population. The remaining jobs are management and training in nature.
3. **Career Ladder Progression:** A somewhat typical pattern of progression is noted within the AFSC 2M0X3/A career ladder. Personnel at the 3- and 5-skill levels work in the technical jobs of the career ladder and spend most of their time on technical tasks. As incumbents move up to the 7-skill level they begin to perform supervisory tasks, but still spend some of their time performing the technical tasks of the career ladder.
4. **Training Analysis:** The current STS warrants review to include many tasks with high percentages of members performing and high training emphasis which are not referenced to any current STS element.
5. **Job Satisfaction:** Job satisfaction among AFSC 2M0X3/A personnel is slightly higher for first-enlistment members and slightly lower for second-enlistment members than the comparative sample of like AFSCs, while slightly higher compared to the previous survey.
6. **Implications:** Survey results clearly indicate that the present classification structure, as described in the latest specialty description, accurately portrays the jobs performed in this career ladder. The career ladder progression is typical, with the move from technical work at the 3- and 5-skill levels to supervisory and management tasks at the 7-skill level. Based on survey data, the career ladder training documents require review to ensure inclusion of relevant elements. Job satisfaction is slightly higher for first-enlistment members and slightly lower for second-enlistment members than the comparative sample of like AFSCs, while slightly higher compared to the previous survey.

THIS PAGE INTENTIONALLY LEFT BLANK

**OCCUPATIONAL SURVEY REPORT (OSR)
MISSILE AND SPACE FACILITIES
(AFSC 2M0X3/A)**

INTRODUCTION

This is a report of an occupational survey of the Missile and Space Facilities career ladder conducted by the Air Force Occupational Measurement Squadron (AFOMS). The current Missile and Space Facilities career ladder was created in April 1994. Survey data will be used to identify current utilization patterns among career ladder personnel and evaluate career ladder documents and training programs.

Background

As described in the AFMAN 36-2108, *Airman Classification*, 31 October 1998, *Specialty Description*, dated 30 April 1994, Missile and Space Facilities personnel install, operate, maintain, and repair power generation and distribution systems, and environmental control and associated support systems and equipment for missile, spacelift, and research and development (R&D) facilities.

Personnel entering the AFSC 2M0X3/A career ladder must attend the L3AQR2M033A-800, Electronic Principles course at Lackland AFB, TX. Upon completion of this 9 week course, students attend the V3ABR2M033A-002, Missile and Space Facilities Apprentice course at Vandenberg AFB, CA lasting 16 weeks and 4 days. Upon completion of this initial skills training, personnel are awarded the 3-skill level.

Entry into this career ladder currently requires an Armed Forces Vocational Aptitude Test Battery (ASVAB) score of Electrical - 33; a strength factor of "G" (Weight lift of 40 lbs) is also required.

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

SURVEY METHODOLOGY

Inventory Development

The data collection instrument for this occupational survey was USAF Job Inventory (JI) Occupational Survey Study Number (OSSN) 2324, dated April 1998. A tentative task list was prepared after reviewing pertinent career ladder publications and directives, pertinent tasks from the previous survey instrument, and data from the last OSR. The preliminary task list was refined and validated through personal interviews with 36 subject-matter experts (SMEs) at the following training location and operational installations:

<u>BASE</u>	<u>UNIT VISITED</u>
Vandenberg AFB CA	532 TRS 576 TRS
F.E. Warren AFB WY	90 MXS
Malmstrom AFB MT	341 MXS

The resulting JI contains a comprehensive listing of 1,007 tasks grouped under 19 duty headings, and a background section requesting such information as grade, base, MAJCOM assigned, organizational level, work schedule, job title, functional area, team training course status, launch system maintained, vehicles operated, equipment operated, and fuels used.

Survey Administration

From May 1998 through September 1998, base training offices at operational units worldwide administered the inventory to eligible AFSC 2M0X3/A personnel. Job incumbents were selected from a computer-generated mailing list obtained from personnel data tapes maintained by the Air Force Personnel Center, Randolph AFB TX. Each individual who completed the inventory first completed an identification and biographical information section and then checked each task performed in his or her current job. After checking all tasks performed, each member then rated each of these tasks on a 9-point scale, showing relative time spent on that task, as compared to all other tasks checked. The ratings ranged from 1 (very small amount time spent) through 5 (about average time spent) to 9 (very large amount time spent). To determine relative time spent for each task checked by a respondent, all of the incumbent's ratings are assumed to account for 100 percent of his or her time spent on the job and are summed. Each task rating is then divided by the total task ratings and multiplied by 100 to provide a relative percentage of time for each task. This procedure provides a basis for comparing tasks in terms of both percent members performing and average percent time spent.

Survey Sample

Personnel were selected to participate in this survey so as to ensure an accurate representation across major commands (MAJCOM) and military paygrade groups. All eligible AFSC 2M0X3/A personnel were mailed survey booklets. Table 1 reflects the percentage distribution, by MAJCOM, of assigned AFSC 2M0X3/A personnel as of May 1998. The 328 respondents in the final sample represent 57 percent of the total assigned personnel and 61 percent of the total personnel surveyed. Table 2 reflects the paygrade distribution for these AFSC 2M0X3/A personnel.

TABLE 1

COMMAND DISTRIBUTION OF AFSC 2M0X3/A PERSONNEL

COMMAND	PERCENT OF ASSIGNED*	PERCENT OF SAMPLE
AFSPC	95	95
AETC	3	5
Other	2	0

TOTAL ASSIGNED* = 575

TOTAL SURVEYED** = 540

TOTAL IN SURVEY SAMPLE = 328

PERCENT OF ASSIGNED IN SAMPLE = 57%

PERCENT OF SURVEYED IN SAMPLE = 61%

* Assigned strength as of May 1998

** Excludes personnel in PCS, student, or hospital status, or less than 6 weeks on the job

TABLE 2

PAYGRADE DISTRIBUTION OF SURVEY SAMPLE

GRADE	PERCENT OF ASSIGNED*	PERCENT OF SAMPLE
E-1 - E-3	17	17
E-4	24	24
E-5	31	33
E-6	15	17
E-7	12	9

* Assigned strength as of May 1998

Both command and paygrade distribution of the survey sample are very close to the percent assigned. This indicates the sample is a true representation of the career ladder population.

Task Factor Administration

Job descriptions alone do not provide sufficient data for making decisions about career ladder documents or training programs. Task factor information is needed for a complete analysis of the career ladder. To obtain the needed task factor data, selected senior AFSC 2M0X3/A personnel (generally E-6 or E-7 craftsmen) also completed a second booklet for either training emphasis (TE) or task difficulty (TD). These booklets were processed separately from the JIs. This information is used in a number of different analyses discussed in more detail within the report.

Training Emphasis (TE): TE is a rating of the amount of emphasis that should be placed on tasks in entry-level training. The 38 senior NCOs who completed a TE booklet were asked to select tasks they felt require some sort of structured training for entry-level personnel and then indicate how much training emphasis these tasks should receive, from 1 (extremely low emphasis) to 9 (extremely high emphasis). Structured training is defined as training provided at resident training schools, field training detachments (FTD), mobile training teams (MTT), formal on-the-job-training (OJT), or any other organized training method. Interrater agreement for these 38 raters was acceptable. The average TE rating was 1.74, with a standard deviation of 2.08. Any task with a TE rating of 3.82 or above is considered to have high TE.

Task Difficulty (TD): TD is an estimate of the amount of time needed to learn how to do each task satisfactorily. The 24 senior NCOs who completed TD booklets were asked to rate the difficulty of each task using a 9-point scale (extremely low to extremely high). Interrater reliability was acceptable. Ratings were standardized so tasks have an average difficulty of 5.00 and a standard deviation of 1.00. Any task with a TD rating of 6.00 or above is considered to be difficult to learn.

When used in conjunction with the primary criterion of percent members performing, TE and TD ratings can provide insight into first-enlistment personnel training requirements. Such insights may suggest a need for lengthening or shortening portions of instruction supporting entry-level jobs.

SPECIALTY JOBS

The first step in the analysis process is to identify the structure of the career ladder in terms of the jobs performed by the respondents. The Comprehensive Occupational Data Analysis Program (CODAP) assists by creating an individual job description for each respondent based on the tasks performed and relative amount of time spent on these tasks. The CODAP automated job clustering program then compares all the individual job descriptions, locates the two descriptions with the most similar tasks and time spent ratings, and combines them to form a composite job description. In successive stages, CODAP either adds new members to this initial group, or forms new groups based on the similarity of tasks and time spent ratings.

The basic group used in the hierarchical clustering process is the Job. When two or more jobs have a substantial degree of similarity, in tasks performed and time spent on tasks, they are grouped together and identified as a Cluster. The structure of the career ladder is then defined in terms of jobs and clusters of jobs.

Overview of Specialty Jobs

Based on the analysis of tasks performed and the amount of time spent performing each task, four independent jobs and three clusters were identified within the career ladder. Figure 1 illustrates the jobs and clusters performed by AFSC 2M0X3/A personnel.

A listing of these jobs and clusters is provided below. The stage (ST) number shown beside each title references computer printed information, the letter "N" indicates the number of personnel in each group.

- I. FACILITIES MAINTENANCE CLUSTER (ST033, N=193)
- II. SUPERVISION CLUSTER (ST018, N=41)
- III. POWER, REFRIGERATION, AND ELECTRIC (PREL) JOB (ST092, N=29)
- IV. MAINTENANCE CONTROLLER CLUSTER (ST014, N=18)
- V. INSTRUCTOR JOB (ST048, N=12)
- VI. EQUIPMENT SUPPORT JOB (ST047, N=7)
- VII. QUALITY ASSURANCE JOB (ST060, N=5)

The respondents forming these jobs and clusters account for 94 percent of the survey sample. The remaining 6 percent, for one reason or another, did not group into one of these jobs or clusters. CDC Writer is an example of a job that did not group into another job or cluster .

AFSC 2M0X3/A CAREER LADDER SPECIALTY JOBS (N = 328)

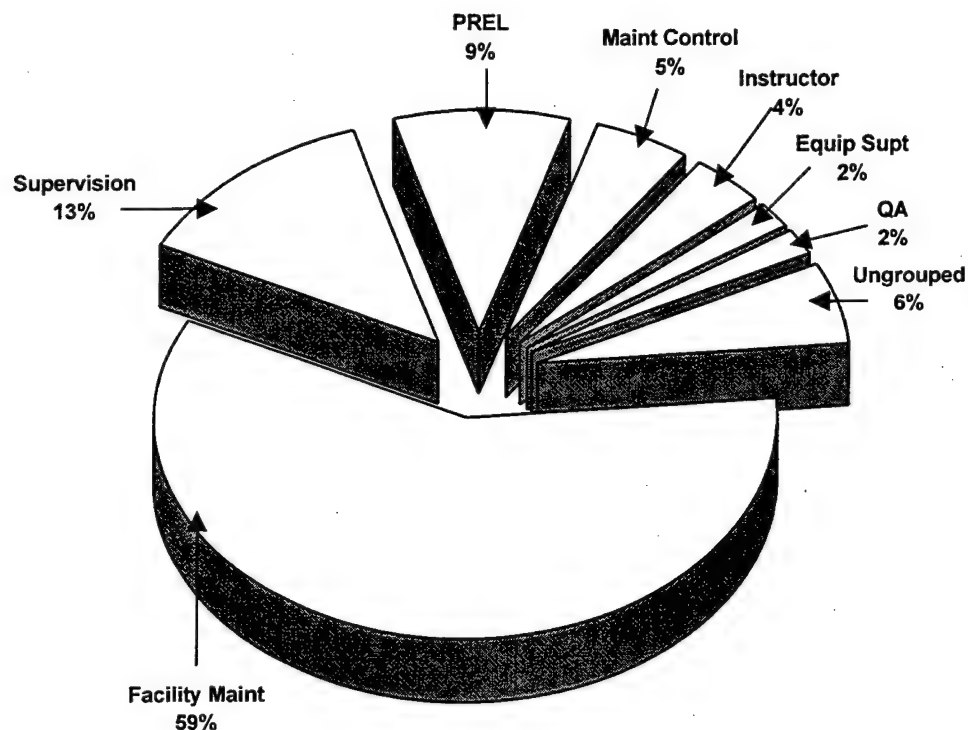


FIGURE 1

Group Descriptions

The following paragraphs contain brief descriptions of the jobs and clusters identified through the career ladder structure analysis. Table 3 presents the relative time spent on duties by members of these specialty jobs and clusters. Selected background data for these jobs and clusters are provided in Table 4. Representative tasks for all the groups are contained in Appendix A.

I. FACILITIES MAINTENANCE CLUSTER (ST033). The 193 airmen performing within this cluster (59 percent of the survey sample) represent the core of the career ladder. They spend 40 percent of their time performing the Launch Facility and Missile Alert Facility Power Generation and Distribution Systems tasks of Duty E, and another 33 percent performing the LF and MAF Environmental Control Systems tasks of Duty F (Table 3). This cluster performs an average 197 tasks, the highest of any other job or cluster, indicating their diversity in performing the core Missile and Space Facilities duties. Distinctive tasks performed include:

- Perform operational checkouts of DEU safety and alarm devices
- Perform operational checkouts of DEU battery chargers
- Perform manual mode operations of DEUs
- Perform operational checkouts of DEU cooling systems
- Perform operational checkouts of DEU fuel oil systems
- Perform operational checkouts of DEU lube oil systems
- Perform operational checkouts of brine chiller control subsystems
- Perform operational checkouts of DEU starting and stopping devices
- Adjust brine chiller components
- Perform operational checkouts of DEU generator control panels

Fifty-seven percent of these airmen hold the 5-skill level and 31 percent the 3-skill level. These members average 5½ years in the career field and 7½ years in the service. The predominant paygrades of this large cluster are E-3 to E-5. Thirty-four percent of this core cluster are in their first enlistment.

There are two distinct jobs within this cluster, the **Facility Maintenance Job** and the **Periodic Maintenance Job**.

The 178 members forming the **Facility Maintenance Job** make up the vast majority of this cluster. These members spend 40 percent of their time performing the tasks associated with the power generation and distribution systems and 34 percent performing the environmental control systems tasks. These members are mainly E-4 and E-5 averaging 8 years in the service.

There are only 12 members in the **Periodic Maintenance Job** who spend a like amount of time performing the power generation and distribution tasks than the previous job, differing only in the type of tasks performed. These members perform periodic inspections and operational checkouts at a higher percentage than the other job of this cluster. They average only 2 ½ years in the service and are mainly E-3s. This job is typical of an entry level maintenance job.

II. SUPERVISION CLUSTER (ST018). The 41 airmen forming this cluster (13 percent of the survey sample) perform an average of 55 tasks and are distinguished by the 65 percent of their time spent performing the Management and Supervisory tasks of Duty P (Table 3). They spend another 24 percent of their time performing the Training, General Administrative and Technical Order, and General Supply and Equipment tasks of Duties Q, R, and S. Typical of the management and supervisory tasks performed include:

- Evaluate personnel for compliance with performance standards
- Interpret policies, directives, or procedures for subordinates
- Write or indorse military performance reports
- Counsel subordinates concerning personal matters
- Determine or establish work assignments or priorities
- Establish performance standards for subordinates
- Conduct supervisory performance feedback sessions
- Conduct self-inspections or self-assessments
- Evaluate personnel for promotion, demotion, reclassification, or special awards
- Inspect personnel for compliance with military standards

The predominant paygrades of this job are E-5 to E-7 (Table 4), averaging 12½ years in the career field and 16½ years in the service. Seventy percent report holding the 7-skill level with 73 percent supervising others.

There were two distinct supervisory jobs identified within this cluster, the **First-Line Supervisor Job** and the **Periodic Maintenance Team (PMT) Supervisor Job**.

The 28 members of the **First-Line Supervisor Job** spend 64 percent of their time performing supervisory tasks and 12 percent performing training tasks. They are mainly E-7s averaging 17 ½ years in the service.

The five members of the **PMT Supervisor Job** are mainly E-6s averaging 15 years in the service. They report spending 86 percent of their time performing supervisory tasks and call themselves PMT Supervisors.

III. POWER, REFRIGERATION, AND ELECTRIC (PREL) JOB (ST092). The 29 airmen forming this job (9 percent of the survey sample) are distinguished by the 52 percent of their time spent performing the Maintaining Support Vehicles tasks of Duty G and the General Missile Facility Maintenance tasks of Duty A (Table 3). They average a high 171 tasks performed, second only to the Facilities Maintenance Cluster. Representative tasks performed by these incumbents include:

- Perform operational checkouts of PT APUs
- Perform operational checkouts of PT ECSs

- Perform operational checkouts of PT security systems
- Perform operational checkouts of PT electrical systems
- Perform periodic inspections of PT ECSs
- Perform periodic inspections of PT security systems
- Perform periodic inspections of PT electrical systems
- Troubleshoot PT APUs
- Troubleshoot PT hoists

The predominant paygrades are E-4 and E-5 with 31 percent reporting they supervise others. Seventy-six percent hold the 5-skill level (Table 4). The members of this job average almost 7 years in the career field and 7½ years in the service.

IV. MAINTENANCE CONTROLLER CLUSTER (ST014). The 18 airmen performing within this cluster (5 percent of the survey sample) represent the personnel performing the job control function. They spend 52 percent of their time performing the Directing and Controlling General Launch Vehicle tasks of Duty H, and another 18 percent performing the Directing and Controlling LV Facility tasks of Duty L (Table 3). This cluster performs an average of only 44 tasks, indicating their specialization in job control duties. Distinctive tasks performed include:

- Participate in scheduling meetings
- Conduct or participate in status meetings
- Provide award fee inputs
- Operate facilities communications equipment
- Operate portable radio equipment
- Participate in contract design reviews
- Participate in systems working group meetings
- Operate computers or local area networks (LANs)
- Complete daily activity log entries
- Conduct or participate in readiness reviews
- Brief daily operations status

Sixty-seven percent of these airmen hold the 7-skill level and 33 percent the 5-skill level. These members average 13 years in the career field and 14 years in the service. The predominant paygrade of this cluster is E-6.

The 18 members of this cluster are divided between two maintenance controller jobs, the **Space Lift Facility Maintenance Controller Job** and the **Missile Facility Maintenance Controller Job**.

The **Space Lift Maintenance Controller Job** members spend 38 percent of the time directing and controlling general launch vehicle activities and 32 percent directing and

controlling launch vehicle facility activities. These predominantly E-6 members average 16 years in the service.

The Missile Facility Maintenance Controller Job personnel report spending 98 percent of their time directing and controlling general launch vehicle activities. These members average performing only 13 tasks and are predominantly E-5s with 11 years in the service.

V. INSTRUCTOR JOB (ST048). Comprising 4 percent of the survey sample, these 12 airmen report 72 percent of their time performing Training tasks of Duty Q. They also spend 8 percent of their time performing the Management and Supervisory tasks of Duty P (Table 3). The members of this job perform an average of only 22 tasks, indicating their specialization in instructional duties. Representative of these limited tasks are:

- Conduct formal course classroom training
- Administer or score tests
- Inspect training materials or aids for operation or suitability
- Maintain training records or files
- Develop or procure training materials or aids
- Develop training programs, plans, or procedures
- Personalize lesson plans
- Evaluate progress of trainees
- Counsel trainees on training progress
- Develop written tests

Fifty percent of these job incumbents hold the 5-skill level and 50 percent the 7-skill level (Table 4). These members average almost 11 years in the career field and 11½ years in the service. The predominant paygrade is E-5.

VI. EQUIPMENT SUPPORT JOB (ST047). The 7 airmen forming this job (only 2 percent of the survey sample) are distinguished by the 52 percent of their time spent performing the General Supply and Equipment tasks of Duty S (Table 3). They average only 19 tasks performed, the lowest of any other job or cluster. Representative tasks performed by these incumbents include:

- Maintain handtools or tool boxes
- Inventory equipment, tools, parts, or supplies
- Issue or log turn-ins of equipment, tools, parts, or supplies
- Evaluate serviceability of equipment, tools, parts, or supplies
- Initiate requisitions for equipment, tools, parts, or supplies
- Maintain organizational equipment or supply records

- Identify and report equipment or supply problems
- Maintain documentation on items requiring periodic inspections or calibrations
- Dispose of waste oil
- Develop equipment checklists

The predominant paygrade is E-5 with 29 percent reporting they supervise others. Seventy-two percent hold the 5-skill level (Table 4). The members of this job average just over 6 years in the career field and almost 9 years in the service.

VII. QUALITY ASSURANCE JOB (ST060). The 5 airmen performing within this cluster (2 percent of the survey sample) represent the personnel performing the QA function. They spend 69 percent of their time performing the Management and Supervisory tasks of Duty P, and another 17 percent performing the Training tasks of Duty Q (Table 3). This cluster performs an average of only 21 tasks, indicating their specialization in QA duties. Distinctive tasks performed include:

- Evaluate job hazards or compliance with Air Force Occupational Safety and Health (AFOSH) program
- Write inspection reports
- Evaluate inspection report findings or inspection procedures
- Interpret policies, directives, or procedures for subordinates
- Evaluate maintenance or utilization of equipment, tools, parts, supplies, or workspace
- Conduct staff assistance visits, inspections, or audits
- Conduct safety inspections of equipment or facilities
- Evaluate effectiveness of training programs, plans, or procedures
- Review TO changes

Sixty percent of these airmen hold the 5-skill level and 40 percent the 7-skill level. These members average almost 14 years in the career field and just over 14 years in the service. The predominant paygrade of this cluster is E-5.

Comparison to Previous Study

The analysis of the job descriptions within this study are almost identical the previous study conducted in 1996 (Table 5).

TABLE 3

RELATIVE PERCENT TIME SPENT ON DUTIES BY SPECIALTY JOBS

DUTIES	Facilities Maint Cluster (ST033) (N=193)	Supv Cluster (ST018) (N=41)	PREL Job (ST092) (N=29)	Maint Controller Cluster (ST014) (N=18)	Instructor Job (ST048) (N=12)	Equip Support Job (ST047) (N=7)	QA Job (ST060) (N=5)
A PERFORMING GENERAL MISSILE FACILITY MAINTENANCE ACTIVITIES	15	3	22	0	6	21	0
B MAINTAINING GUIDANCE AND CONTROL (G AND C) LIQUID COOLING SYSTEMS	*	*	11	0	0	0	0
C MAINTAINING GUIDANCE AND CONTROL CONDITIONING UNIT (GCCU) SYSTEMS	2	*	4	0	0	0	0
D MAINTAINING GCCU TEST EQUIPMENT	*	*	2	0	0	0	0
E MAINTAINING LAUNCH FACILITY (LF) AND MISSILE ALERT FACILITY (MAF) POWER GENERATION AND DISTRIBUTION SYSTEMS	40	1	*	0	*	0	0
F MAINTAINING LF AND MAF ENVIRONMENTAL CONTROL SYSTEMS (ECSs)	33	1	3	0	5	0	0
G MAINTAINING SUPPORT VEHICLES	2	2	52	0	0	1	0
H DIRECTING AND CONTROLLING GENERAL LAUNCH VEHICLE (LV) ACTIVITIES	*	4	*	59	2	*	0
I PERFORMING FACILITY ENVIRONMENTAL DEFENSE SYSTEM ACTIVITIES	*	*	0	0	0	0	0
J DIRECTING AND CONTROLLING LV MECHANICAL ACTIVITIES	*	0	*	1	0	0	0
K DIRECTING AND CONTROLLING LV ELECTRICAL ACTIVITIES	*	0	0	*	0	0	0
L DIRECTING AND CONTROLLING LV FACILITY ACTIVITIES	*	0	0	18	2	0	0
M DIRECTING AND CONTROLLING PAYLOAD (INCLUDES SPACECRAFT), UPPERSTAGE, OR FAIRING ACTIVITIES	*	0	0	3	0	0	0
N DIRECTING AND CONTROLLING SOLID ROCKET MOTOR (SRM) ACTIVITIES	*	0	0	*	0	0	0
O PERFORMING GENERAL RESEARCH AND DEVELOPMENT ACTIVITIES	*	0	*	*	0	1	0
P PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	3	65	4	10	8	22	69
Q PERFORMING TRAINING ACTIVITIES	2	12	1	6	72	1	17
R PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM ACTIVITIES	*	6	*	1	3	2	9
S PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	1	6	1	1	2	52	4

* less than 1 percent

TABLE 4

SELECTED BACKGROUND DATA FOR SPECIALTY JOBS

	Facilities Maint Cluster (ST033)	Supv Cluster (ST018)	PREL Job (ST092)	Maint Controller Cluster (ST014)	Instructor Job (ST048)	Equip Support Job (ST047)	QA Job (ST060)
NUMBER IN GROUP	193	41	29	18	12	7	5
PERCENT OF SAMPLE	59%	13%	9%	5%	4%	2%	2%
DAFSC DISTRIBUTION:							
2M033A	31	0	17	0	0	14	0
2M053	57	30	76	33	50	72	60
2M073	12	70	7	67	50	14	40
PAYGRADES							
E-1 - E-3	25	0	14	0	0	14	0
E-4	30	0	41	6	17	29	0
E-5	32	22	38	28	50	43	60
E-6	10	29	7	61	25	14	0
E-7	3	49	0	6	8	0	40
AVERAGE MONTHS IN CAREER FIELD	66	149	86	160	129	75	165
AVERAGE MONTHS IN SERVICE	91	197	89	169	139	107	171
PERCENT IN FIRST ENLISTMENT (1-48 MOS TAFMS)	34%	0	16%	0	0	14%	0
PERCENT SUPERVISING	36%	73%	31%	33%	25%	29%	0
AVERAGE NUMBER OF TASKS PERFORMED	197	55	171	44	22	19	21

TABLE 5

SPECIALTY JOB COMPARISON BETWEEN CURRENT AND 1996 SURVEYS

CURRENT SURVEY (N=328)	1996 SURVEY (N=370)
FACILITIES MAINTENANCE CLUSTER	FACILITY AND PERIODIC MAINTENANCE TEAM CLUSTER
SUPERVISION CLUSTER	SUPERVISORY CLUSTER
POWER, REFRIGERATION, AND ELECTRIC (PREL) JOB	PREL TECHNICIAN JOB
MAINTENANCE CONTROLLER JOB	JOB CONTROL JOB
INSTRUCTOR JOB	TRAINING JOB
EQUIPMENT SUPPORT JOB	SUPPLY JOB
QUALITY ASSURANCE JOB	QA JOB

ANALYSIS OF DAFSC GROUPS

An analysis of DAFSC groups, in conjunction with the analysis of the career ladder structure, is an important part of each occupational survey. The DAFSC analysis identifies differences in tasks performed at the various skill levels. This information may then be used to evaluate how well career ladder documents, such as the AFMAN 36-2108 *Airman Classification*, Specialty Description and the Career Field Education and Training Plan (CFETP), reflect what career ladder personnel are actually doing in the field.

The distribution of skill-level groups across the career ladder jobs and clusters is displayed in Table 6, while Table 7 offers another perspective by displaying the relative percent time spent on each duty across skill-level groups. A somewhat typical pattern of progression is noted within the AFSC 2M0X3/A career ladder. Personnel at the 3- and 5-skill levels work in the technical jobs of the career ladder and spend most of their time on technical tasks. As incumbents move up to the 7-skill level they begin to perform supervisory tasks, but still spend some of their time performing the technical tasks of the career ladder.

Skill-Level Descriptions

DAFSC 2M033A Representing 21 percent of the survey sample, these 69 airmen perform an average of 173 tasks. Eighty-seven percent of this group work in the Facilities Maintenance Cluster (Table 6).

Table 7 reflects the percent time spent on duties by DAFSC 2M033A personnel. At the 3-skill level, their time is well distributed among the technical tasks of the career ladder. Representative tasks performed by these members are listed in Table 8.

DAFSC 2M053 The 177 members of this group account for 54 percent of the survey sample. Sixty-two percent work in the Facilities Maintenance Cluster (Table 6).

Table 7 provides a comparison of the relative time spent on duties at the 5-skill level. This table reflects a pattern similar to the 3-skill level, with fairly even distribution of members performing the technical tasks of the career ladder. As shown in this table, 5-skill level personnel begin to perform the supervisory tasks of Duty P.

Table 9 lists representative tasks performed by these DAFSC 2M053 personnel. Table 10 reflects those tasks which best differentiate the 3-skill levels from the 5-skill levels. This table shows 3-skill level personnel perform several technical tasks much more frequently than the 5-skill level, while the 5-skill level personnel perform training tasks not performed at the 3-skill level.

DAFSC 2M073 These 82 members perform an average of 114 tasks and represent 25 percent of the survey sample. Table 6 shows the highest percentage of members are in the Supervision Cluster, while 29 percent perform in the Facilities Maintenance Cluster.

Table 7 reflects the percent time spent on duties by DAFSC 2M073 members. The main point of this table is the decrease in the amount of time spent by members performing the technical tasks of Duties A-K, compared to the 3- and 5-skill level members, while increasing the time spent performing management and supervisory tasks.

Representative tasks performed by 7-skill level members are reflected in Table 11. Table 12 reflects tasks which best differentiate between 5- and 7-skill levels. This table clearly shows a much higher devotion to management and supervisory tasks at the 7-skill level than the 5-skill level.

Summary

Progression in the Missile and Space Facilities career ladder follows a regular pattern of highly technical job focus at the lower skill levels, with a broadening into supervision and management at the 7-skill level. An emphasis is clearly seen performing primarily the core job of the career ladder at the 3- and 5-skill levels, with broadening into supervisory functions at the 7-skill level.

TABLE 6

DISTRIBUTION OF DAFSC GROUP MEMBERS ACROSS SPECIALTY JOBS
(PERCENT RESPONDING)

<u>SPECIALTY JOBS</u>	2M033A (N=69)	2M053 (N=177)	2M073 (N=82)
I. FACILITIES MAINTENANCE CLUSTER	87	62	29
II. SUPERVISION CLUSTER	0	7	34
III. POWER, REFRIGERATION, AND ELECTRIC (PREL) JOB	7	12	2
IV. MAINTENANCE CONTROLLER CLUSTER	0	3	15
V. INSTRUCTOR JOB	0	3	7
VI. EQUIPMENT SUPPORT JOB	1	3	1
VII. QUALITY ASSURANCE JOB	0	2	2
NOT GROUPED	5	7	10

TABLE 7
RELATIVE PERCENT TIME SPENT ON DUTIES BY DAFSC GROUPS

DUTIES	2M033A (N=69)	2M053 (N=177)	2M073 (N=82)
A PERFORMING GENERAL MISSILE FACILITY MAINTENANCE ACTIVITIES	20	14	9
B MAINTAINING GUIDANCE AND CONTROL (G AND C) LIQUID COOLING SYSTEMS	1	2	1
C MAINTAINING GUIDANCE AND CONTROL CONDITIONING UNIT (GCCU) SYSTEMS	1	3	*
D MAINTAINING GCCU TEST EQUIPMENT	*	1	*
E MAINTAINING LAUNCH FACILITY (LF) AND MISSILE ALERT FACILITY (MAF) POWER GENERATION AND DISTRIBUTION SYSTEMS	37	25	12
F MAINTAINING LF AND MAF ENVIRONMENTAL CONTROL SYSTEMS (ECSS)	29	22	10
G MAINTAINING SUPPORT VEHICLES	6	8	3
H DIRECTING AND CONTROLLING GENERAL LAUNCH VEHICLE (LV) ACTIVITIES	*	4	11
I PERFORMING FACILITY ENVIRONMENTAL DEFENSE SYSTEM ACTIVITIES	*	*	*
J DIRECTING AND CONTROLLING LV MECHANICAL ACTIVITIES	*	*	*
K DIRECTING AND CONTROLLING LV ELECTRICAL ACTIVITIES	*	*	*
L DIRECTING AND CONTROLLING LV FACILITY ACTIVITIES	*	*	4
M DIRECTING AND CONTROLLING PAYLOAD (INCLUDES SPACECRAFT), UPPERSTAGE, OR FAIRING ACTIVITIES	*	*	*
N DIRECTING AND CONTROLLING SOLID ROCKET MOTOR (SRM) ACTIVITIES	0	*	*
O PERFORMING GENERAL RESEARCH AND DEVELOPMENT ACTIVITIES	*	*	*
P PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	2	9	31
Q PERFORMING TRAINING ACTIVITIES	1	6	10
R PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM ACTIVITIES	*	2	4
S PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	2	4	4

* less than 1 percent

TABLE 8

REPRESENTATIVE TASKS PERFORMED BY 2M033A PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=69)
A0027	Perform minor repairs, such as splicing wires, soldering, or tightening parts	86
E0209	Perform operational checkouts of DEU safety and alarm devices	86
E0201	Perform manual mode operations of DEUs	84
E0205	Perform operational checkouts of DEU cooling systems	84
E0208	Perform operational checkouts of DEU lube oil systems	84
E0206	Perform operational checkouts of DEU fuel oil systems	84
F0317	Perform operational checkouts of brine chiller control subsystems	84
E0204	Perform operational checkouts of DEU battery chargers	84
E0210	Perform operational checkouts of DEU starting and stopping devices	83
A0062	Raise or lower equipment by hand	81
A0026	Perform LF entry and exit procedures	81
A0036	Perform operational checkouts of sump pumps	81
E0207	Perform operational checkouts of DEU generator control panels	81
A0017	Maintain handtools or tool boxes	80
F0316	Perform operational checkouts of alarm control panels or controls	80
F0318	Perform operational checkouts of fault alarm control panels or controls	80
E0188	Adjust DEU air intake and exhaust system components, such as valve lash adjustment	78
F0320	Perform operational checkouts of instrument air systems	77
F0315	Perform operational checkouts of air-conditioning subsystems or controls, other than emergency systems	77
F0322	Perform operational checkouts of LF emergency air-conditioning subsystems or controls	77
F0312	Perform brine flow checks of LFs	77
A0057	Perform periodic inspections of shotguns or gas masks	75
E0294	Verify main fuel tank levels	75
F0321	Perform operational checkouts of launch tube heating subsystems or controls	75
E0187	Adjust diesel engine unit (DEU) cooling system components	75
F0313	Perform brine flow checks of MAFs	75
E0189	Adjust DEU cranking and alarm panel components	75
E0195	Adjust DEU safety and alarm device components	74
F0327	Perform operational checkouts of ventilation subsystems or controls	74
F0347	Perform startups and checkouts of ECSs	74
E0192	Adjust DEU generator control panel components	74
E0202	Perform MPP site interface checkouts	74
E0216	Perform periodic inspections of DEU battery chargers	72
E0217	Perform periodic inspections of DEU cooling systems	72
E0191	Adjust DEU fuel oil system components	72
F0297	Adjust brine chiller components	72
E0269	Service DEU cooling systems	72
E0218	Perform periodic inspections of DEU cranking and alarm panels	71
E0271	Service DEU lube oil systems	71
E0196	Adjust DEU starting and stopping device components	71

* Average Number of Tasks Performed - 173

TABLE 9

REPRESENTATIVE TASKS PERFORMED BY 2M053 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=177)
		71
A0027	Perform minor repairs, such as splicing wires, soldering, or tightening parts	63
F0297	Adjust brine chiller components	62
F0309	Adjust refrigerant subsystem components	60
A0017	Maintain handtools or tool boxes	60
F0302	Adjust ECS pneumatic electrical switches	60
F0301	Adjust ECS flow alarms	60
F0371	Troubleshoot brine chiller control panels or subsystems	59
F0304	Adjust ECS thermostats	59
F0317	Perform operational checkouts of brine chiller control subsystems	59
F0306	Adjust instrument air system components	59
F0372	Troubleshoot brine subsystems	58
F0296	Adjust air-conditioning subsystem components, other than emergency systems	58
F0310	Adjust ventilation subsystems or controls	58
F0350	Remove or install brine chiller components	58
F0298	Adjust ECS damper operators	57
F0347	Perform startups and checkouts of ECSs	57
F0305	Adjust heating subsystems or controls	57
F0368	Service refrigerant subsystems	57
F0345	Perform refrigerant subsystem leak checks	57
F0352	Remove or install brine chiller control subsystem components	57
F0366	Service brine subsystems	57
F0299	Adjust ECS dampers	56
F0346	Perform shutdowns and checkouts of ECSs	56
F0383	Troubleshoot refrigerant subsystems	56
F0320	Perform operational checkouts of instrument air systems	56
F0376	Troubleshoot instrument air systems	55
E0201	Perform manual mode operations of DEUs	55
F0369	Troubleshoot air-conditioning subsystems, other than emergency subsystems or controls	55
F0316	Perform operational checkouts of alarm control panels or controls	55
E0269	Service DEU cooling systems	55
E0204	Perform operational checkouts of DEU battery chargers	55
E0195	Adjust DEU safety and alarm device components	55
F0384	Troubleshoot ventilation subsystems or controls	55
E0191	Adjust DEU fuel oil system components	55
F0348	Remove or install air-conditioning subsystem components, other than emergency systems	55
F0303	Adjust ECS restrictors	55
F0356	Remove or install instrument air system components	54
E0237	Perform test mode operations of DEUs	54
E0265	Remove or install power generation and distribution system minor hardware, such as gaskets or bolts	54
A0095	Test brine solutions	54
E0209	Perform operational checkouts of DEU safety and alarm devices	54

* Average Number of Tasks Performed - 146

TABLE 10

TASKS WHICH BEST DIFFERENTIATE BETWEEN
DAFSCs 2M033A AND 2M053 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS	2M033A (N=69)	2M053 (N=177)	DIFF
A0057 Perform periodic inspections of shotguns or gas masks	75.36	28.81	46.55
A0058 Perform periodic inspections of sump pumps	68.12	31.07	37.04
A0052 Perform periodic inspections of secondary doors	59.42	24.86	34.56
A0036 Perform operational checkouts of sump pumps	81.16	47.46	33.70
A0023 Perform emergency war order (EWO) LF evacuations	73.91	41.81	32.11
E0221 Perform periodic inspections of DEU generator control panels	68.12	36.72	31.39
E0209 Perform operational checkouts of DEU safety and alarm devices	85.51	54.24	31.27
A0053 Perform periodic inspections of security pit vault cables	56.52	25.42	31.10
E0220 Perform periodic inspections of DEU fuel oil systems	69.57	38.98	30.58
E0208 Perform operational checkouts of DEU lube oil systems	84.06	53.67	30.39
Q0966 Counsel trainees on training progress	1.45	24.86	-23.41
Q0977 Maintain training records or files	2.90	25.99	-23.09
P0940 Evaluate personnel for compliance with performance standards	7.25	27.68	-20.44
Q0975 Evaluate progress of trainees	2.90	23.16	-20.27
Q0969 Develop training programs, plans, or procedures	1.45	20.90	-19.45
Q0976 Inspect training materials or aids for operation or suitability	1.45	20.34	-18.89
Q0964 Conduct formal course classroom training	1.45	19.77	-18.32
Q0978 Personalize lesson plans	1.45	19.77	-18.32
Q0971 Develop or procure training materials or aids	1.45	19.77	-18.32
Q0965 Conduct on-the-job training (OJT)	5.80	23.73	-17.93

TABLE 11

REPRESENTATIVE TASKS PERFORMED BY 2M073 PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=82)
		63
P0920	Conduct supervisory performance feedback sessions	60
P0918	Conduct self-inspections or self-assessments	59
P0925	Determine or establish work assignments or priorities	57
P0923	Counsel subordinates concerning personal matters	56
P0958	Write or indorse military performance reports	55
P0940	Evaluate personnel for compliance with performance standards	54
P0921	Conduct safety inspections of equipment or facilities	52
P0931	Develop or establish work schedules	52
P0959	Write recommendations for awards or decorations	50
P0936	Establish performance standards for subordinates	50
P0946	Inspect personnel for compliance with military standards	49
P0917	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	49
P0939	Evaluate job hazards or compliance with Air Force Occupational Safety and Health (AFOSH) program	48
P0922	Conduct supervisory orientations for newly assigned personnel	45
P0915	Assign personnel to work areas or duty positions	45
P0924	Determine or establish logistics requirements, such as personnel, equipment, tools, parts, supplies, or workspace	45
P0947	Interpret policies, directives, or procedures for subordinates	45
P0938	Evaluate inspection report findings or inspection procedures	44
P0942	Evaluate maintenance or utilization of equipment, tools, parts, supplies, or workspace	44
P0960	Write replies to inspection reports	43
P0928	Develop self-inspection or self-assessment program checklists	41
Q0977	Maintain training records or files	41
P0941	Evaluate personnel for promotion, demotion, reclassification, or special awards	41
A0027	Perform minor repairs, such as splicing wires, soldering, or tightening parts	41
P0945	Initiate actions required due to substandard performance of personnel	40
P0930	Develop or establish work methods or procedures	40
P0953	Schedule personnel for temporary duty (TDY) assignments, leaves, or passes	40
A0017	Maintain handtools or tool boxes	38
P0952	Review drafts of supplements or changes to directives, such as policy directives, instructions, or manuals	38
S1001	Evaluate serviceability of equipment, tools, parts, or supplies	38
Q0967	Determine training requirements	37
Q0975	Evaluate progress of trainees	37
S1004	Inventory equipment, tools, parts, or supplies	37
P0943	Implement safety or security programs	37
A0021	Perform emergency electrical isolations	35
R0997	Review TO changes	35
S1003	Initiate requisitions for equipment, tools, parts, or supplies	35
P0937	Establish procedures for accountability of equipment, tools, parts, or supplies	34
S1002	Identify and report equipment or supply problems	

* Average Number of Tasks Performed - 114

TABLE 12

TASKS WHICH BEST DIFFERENTIATE BETWEEN
DAFSCs 2M053 AND 2M073 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS	2M053 (N=177)	2M073 (N=82)	DIFF
F0351 Remove or install brine chillers	53.67	18.29	35.38
F0297 Adjust brine chiller components	63.28	32.93	30.35
F0305 Adjust heating subsystems or controls	57.06	26.83	30.23
F0322 Perform operational checkouts of LF emergency air-conditioning subsystems or controls	50.85	20.73	30.12
F0317 Perform operational checkouts of brine chiller control subsystems	59.32	29.27	30.05
F0309 Adjust refrigerant subsystem components	61.58	31.71	29.87
A0109 Troubleshoot sump pumps	47.46	18.29	29.16
A0027 Perform minor repairs, such as splicing wires, soldering, or tightening parts	70.62	41.46	29.16
F0366 Service brine subsystems	57.06	28.05	29.01
F0350 Remove or install brine chiller components	58.19	29.27	28.92
Q0967 Determine training requirements	15.25	37.80	-22.55
P0948 Investigate accidents or incidents	4.52	26.83	-22.31
P0930 Develop or establish work methods or procedures	18.08	40.24	-22.16
P0927 Develop resource protection programs	.56	21.95	-21.39
R0998 Write minutes of briefings, conferences, or meetings	3.95	24.39	-20.44
Q0974 Evaluate effectiveness of training programs, plans, or procedures	11.86	31.71	-19.84
S0999 Coordinate maintenance of equipment with appropriate agencies	14.69	32.93	-18.24
P0919 Conduct staff assistance visits, inspections, or audits	3.95	21.95	-18.00

TRAINING ANALYSIS

Occupational survey data are one of many sources of information which can be used to assist in the development of a training program relevant to the needs of personnel in their first enlistment. Factors which may be used in evaluating training include the overall description of the work being performed by first-job or first-enlistment personnel and their overall distribution across career ladder jobs, percentages of first-enlistment (1-48 months TAFMS) members performing specific tasks, as well as TE and TD ratings (previously explained in the **SURVEY METHODOLOGY** section).

First-Enlistment Personnel

There are 73 members in their first-enlistment, representing 22 percent of the total survey sample. Figure 2 reflects the distribution of first-enlistment personnel within the career ladder. Table 13 displays the relative percent of time spent on duties by first-enlistment personnel. Reviewing the table, first-enlistment personnel spend 89 percent of their time performing the General Missile Facility Maintenance tasks of Duty A, the Power Generation and Distribution tasks of Duty E and the Environmental Control Systems tasks of Duty F. First-enlistment personnel are primarily employed in the Facilities Maintenance Cluster, with representative tasks performed displayed in Table 14. Table 15 reflects the Equipment used by first-enlistment respondents.

**DISTRIBUTION OF 2M0X3/A FIRST-ENLISTMENT PERSONNEL
ACROSS SPECIALTY JOBS
(N = 73)**

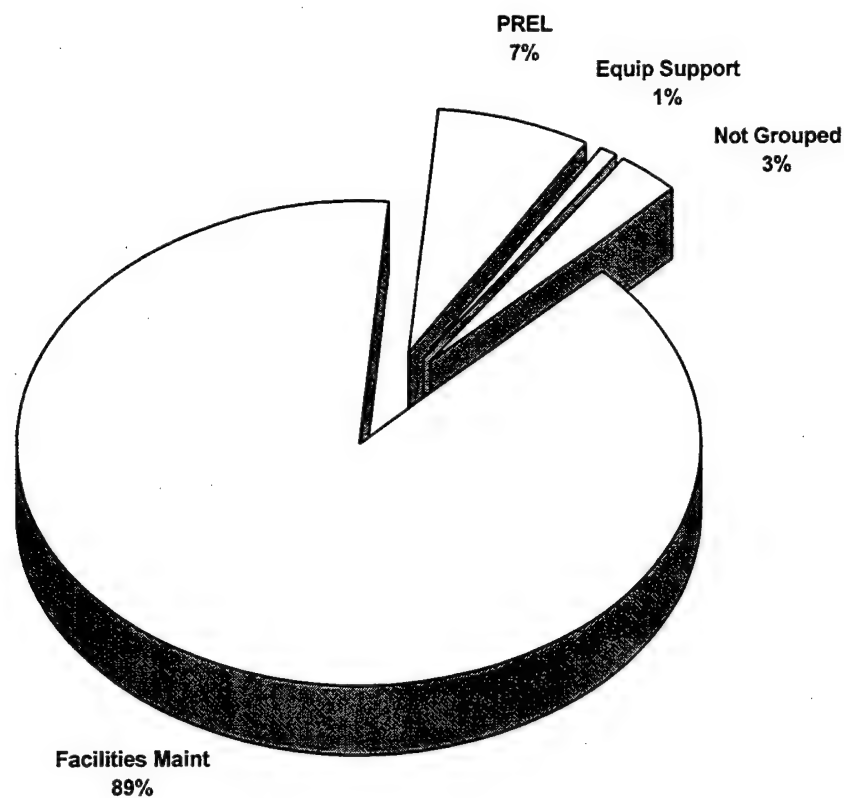


FIGURE 2

TABLE 13
RELATIVE PERCENT TIME SPENT ON DUTIES BY
FIRST-ENLISTMENT PERSONNEL
(N=73)

DUTIES		PERCENT TIME SPENT
A	PERFORMING GENERAL MISSILE FACILITY MAINTENANCE ACTIVITIES	20
B	MAINTAINING GUIDANCE AND CONTROL (G AND C) LIQUID COOLING SYSTEMS	1
C	MAINTAINING GUIDANCE AND CONTROL CONDITIONING UNIT (GCCU) SYSTEMS	1
D	MAINTAINING GCCU TEST EQUIPMENT	*
E	MAINTAINING LAUNCH FACILITY (LF) AND MISSILE ALERT FACILITY (MAF) POWER GENERATION AND DISTRIBUTION SYSTEMS	39
F	MAINTAINING LF AND MAF ENVIRONMENTAL CONTROL SYSTEMS (ECSs)	30
G	MAINTAINING SUPPORT VEHICLES	6
H	DIRECTING AND CONTROLLING GENERAL LAUNCH VEHICLE (LV) ACTIVITIES	*
I	PERFORMING FACILITY ENVIRONMENTAL DEFENSE SYSTEM ACTIVITIES	*
J	DIRECTING AND CONTROLLING LV MECHANICAL ACTIVITIES	*
K	DIRECTING AND CONTROLLING LV ELECTRICAL ACTIVITIES	*
L	DIRECTING AND CONTROLLING LV FACILITY ACTIVITIES	*
M	DIRECTING AND CONTROLLING PAYLOAD (INCLUDES SPACECRAFT), UPPERSTAGE, OR FAIRING ACTIVITIES	*
N	DIRECTING AND CONTROLLING SOLID ROCKET MOTOR (SRM) ACTIVITIES	*
O	PERFORMING GENERAL RESEARCH AND DEVELOPMENT ACTIVITIES	*
P	PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	*
Q	PERFORMING TRAINING ACTIVITIES	*
R	PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM ACTIVITIES	2
S	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	

* less than 1 percent

TABLE 14

REPRESENTATIVE TASKS PERFORMED BY AFSC 2M0X3/A
FIRST-ENLISTMENT PERSONNEL

TASKS		PERCENT MEMBERS PERFORMING (N=73)
A0027	Perform minor repairs, such as splicing wires, soldering, or tightening parts	88
E0209	Perform operational checkouts of DEU safety and alarm devices	88
A0062	Raise or lower equipment by hand	86
E0205	Perform operational checkouts of DEU cooling systems	86
E0208	Perform operational checkouts of DEU lube oil systems	86
E0206	Perform operational checkouts of DEU fuel oil systems	86
E0204	Perform operational checkouts of DEU battery chargers	86
E0201	Perform manual mode operations of DEUs	85
A0026	Perform LF entry and exit procedures	84
E0210	Perform operational checkouts of DEU starting and stopping devices	84
E0207	Perform operational checkouts of DEU generator control panels	84
F0317	Perform operational checkouts of brine chiller control subsystems	82
E0294	Verify main fuel tank levels	79
E0188	Adjust DEU air intake and exhaust system components, such as valve lash adjustment	79
F0312	Perform brine flow checks of LFs	79
A0036	Perform operational checkouts of sump pumps	78
A0017	Maintain handtools or tool boxes	77
F0316	Perform operational checkouts of alarm control panels or controls	77
F0322	Perform operational checkouts of LF emergency air-conditioning subsystems or controls	77
F0318	Perform operational checkouts of fault alarm control panels or controls	77
E0187	Adjust diesel engine unit (DEU) cooling system components	77
F0313	Perform brine flow checks of MAFs	77
F0320	Perform operational checkouts of instrument air systems	75
F0321	Perform operational checkouts of launch tube heating subsystems or controls	75
F0315	Perform operational checkouts of air-conditioning subsystems or controls, other than emergency systems	75
E0271	Service DEU lube oil systems	75
E0195	Adjust DEU safety and alarm device components	75
F0347	Perform startups and checkouts of ECSs	75
F0297	Adjust brine chiller components	75
E0269	Service DEU cooling systems	75
E0192	Adjust DEU generator control panel components	75
E0189	Adjust DEU cranking and alarm panel components	75
E0295	Verify MPP failure using power system verification boxes (PSVBs)	75
E0202	Perform MPP site interface checkouts	75
A0057	Perform periodic inspections of shotguns or gas masks	74
E0194	Adjust DEU lube oil system components	74
E0191	Adjust DEU fuel oil system components	74
E0236	Perform prestart checks of DEUs	73

* Average Number of Tasks Performed -173

TABLE 15

EQUIPMENT USED BY
FIRST-ENLISTMENT AFSC 2M0X3/A PERSONNEL

EQUIPMENT	1ST ENL (N=73)
Multimeters	97
Manifold Gauge Sets	96
Calibrated Thermometers	95
Manometers	95
Belt Alignment Tools	93
Ammeters	92
Gauges, Differential Pressure	92
Electronic Leak Detectors	90
Torque Wrenches	90
Electric Drills	89
Hydrometers	88
Emergency Breathing Apparatus	86
Gauges, Tension	86
Power System Verification Boxes	86
Gauges, Pressure (Other than differential)	85
Vibrogrounds	85
Air Compressors	84
Meters, Frequency	82
Ultraviolet Lights	81
Elevator Work Cages	79
Fault Locating Indicators	79
Refrigerant Reclaimers/Recyclers	79
Battery Chargers	78
Refrigerant Scales	78
Graduated Cylinders	77
Gas Detectors	73
Johnson Control Kits	71
Soldering Irons	71
Pneumatic Tools	70
Portable Sump Pump Kits	68
Gauges, Micron	66
Test Sets, Temperature Control	66
Meters, Phase Rotation	64
Vacuum Pumps	63
Battery Load Testers	53
Direct Current (DC) Power Supplies	53
Portable Heaters	52

Training Emphasis (TE) and Task Difficulty (TD) Data

TE and TD data are secondary factors that can assist technical school personnel in deciding which tasks should be emphasized in entry-level training. These ratings, based on the judgments of senior career ladder NCOs working at operational units in the field, are collected to provide training personnel with a rank-ordering of those tasks in the JI considered important for first-enlistment personnel training (see Table 16 for the top-rated tasks), along with a measure of the difficulty of the JI tasks (see high rated tasks presented in Table 17). When combined with data on the percentages of first-enlistment personnel performing tasks, comparisons can then be made to determine if training adjustments are necessary. For example, tasks receiving high ratings on both task factors, accompanied by moderate to high percentages performing, may warrant resident training. Those tasks receiving high task factor ratings, but low percentages performing, may be more appropriately planned for OJT programs within the career ladder. Low task factor ratings may highlight tasks best omitted from training for first-enlistment personnel, but this decision must be weighed against percentages of personnel performing the tasks, command concerns, and criticality of the tasks.

To assist technical school personnel, AFOMS has developed a computer program that incorporates these secondary factors and the percentage of first-enlistment personnel performing each task to produce an Automated Training Indicator (ATI) for each task. These indicators correspond to training decisions listed and defined in the Training Decision Logic Table found in Attachment 2, AETCI 36-2601, and allows course personnel to quickly focus their attention on those tasks which are most likely to qualify for initial resident course consideration.

Table 16 presents tasks with the highest TE ratings for AFSC 2M0X3/A first-enlistment airmen, while Table 17 displays those tasks AFSC 2M0X3/A raters judged to be most difficult to learn. For example, TE raters (refer to Table 16) reported that tasks such as performing operational checks of air-conditioning subsystems or controls and brine chiller control subsystems require a high degree of training emphasis and, from the data, most airmen in their first job and within their first enlistment are performing these tasks. Table 17 shows TD raters reported troubleshooting, adjusting, and calibrating GCCU test benches to be among the most difficult tasks to learn. However, due to the low numbers of individuals performing these types of tasks, they would be inappropriate for inclusion in a resident curriculum and are more appropriately taught as OJT items.

Various lists of tasks, accompanied by TE and TD ratings, and where appropriate, ATI information, are contained in the TRAINING EXTRACT package and should be reviewed in detail by training school personnel. (For a more detailed explanation of TE and TD ratings, see Task Factor Administration in the **SURVEY METHODOLOGY** section of this report.)

TABLE 16

TASKS RATED HIGHEST IN TRAINING EMPHASIS

TASKS	TNG EMP	PERCENT MEMBERS PERFORMING			TSK DIFF
		1ST JOB (N=37)	1ST ENL (N=73)		
A0026	6.61	86	84		4.00
F0315	6.55	70	75		5.52
F0317	6.53	81	82		5.41
A0022	6.53	73	74		4.53
F0322	6.53	73	77		5.23
F0316	6.50	76	77		5.51
F0321	6.42	70	75		5.22
F0297	6.42	57	75		5.82
F0309	6.42	54	68		5.98
F0304	6.42	51	68		5.75
F0301	6.42	54	70		5.78
F0320	6.39	73	75		4.94
E0290	6.37	49	64		6.49
E0295	6.32	62	75		6.08
A0021	6.32	70	71		4.54
F0327	6.29	73	73		5.18
A0023	6.26	78	74		4.17
F0369	6.26	46	66		6.37
E0202	6.24	62	75		5.58
F0328	6.21	59	55		5.42
F0296	6.18	54	71		5.91
F0318	6.18	76	77		5.45
F0371	6.18	54	68		6.30
E0225	6.18	73	64		4.61
E0284	6.16	54	68		5.68

* Mean TE Rating is 1.74, and the Standard Deviation is 2.08 (High TE = 3.82)

** Average TD Rating is 5.00

TABLE 17

TASKS RATED HIGHEST IN TASK DIFFICULTY

TASKS	TASK DIFF	1ST JOB (N=37)	1ST ENL (N=73)	PERCENT MEMBERS PERFORMING			TNG EMP
				3-SKL LVL (N=69)	5-SKL LVL (N=177)	7-SKL LVL (N=82)	
D0183	11.49	5	3	3	5	4	.74
C0168	7.69	3	5	3	17	5	1.11
H0565	7.67	3	1	1	0	10	.08
L0723	7.67	0	0	0	1	9	.00
D0174	7.58	5	3	3	6	2	.74
D0180	7.58	3	1	1	5	2	.74
D0173	7.58	5	4	4	5	2	.74
D0176	7.58	5	4	4	6	2	.74
D0175	7.58	5	4	4	5	2	.74
D0184	7.58	0	0	0	5	5	.74
F0314	7.35	59	70	70	52	24	5.53
G0506	7.02	5	8	9	11	9	1.82
G0507	6.86	5	7	7	8	6	1.74
G0489	6.86	8	5	7	3	5	1.00
O0843	6.86	0	0	0	0	1	.08
G0490	6.86	8	5	7	2	5	1.00
G0491	6.86	8	5	7	2	5	1.00
O0844	6.86	0	0	0	0	1	.08
G0488	6.86	8	5	6	3	4	.68
C0167	6.82	3	7	4	17	5	1.11
C0166	6.82	3	7	4	17	5	1.11
C0170	6.82	3	5	3	18	5	1.11
G0404	6.78	5	8	9	12	9	1.87
G0493	6.74	11	14	14	15	10	2.68
B0115	6.74	8	7	7	11	5	1.55
Calibrate G and C liquid cooling test and repair bench components							

* Mean TE Rating is 1.74, and the Standard Deviation is 2.08 (High TE = 3.82)

** Average TD Rating is 5.00

Specialty Training Standard (STS)

A comprehensive review of STS 2M0X3/A, dated July 1996, compared STS items to survey data (based on the previously mentioned assistance from subject-matter experts in matching JI tasks to STS elements). STS elements containing general knowledge information, mandatory entries, subject-matter-knowledge-only requirements, or basic supervisory responsibilities were not examined. Task knowledge and performance elements of the STS were compared against the standard set forth in AETCI 36-2601 and AFI 36-2623 (i.e., include tasks performed or knowledge required by 20 percent or more of the personnel in a skill level [criterion group] of the AFS).

The 2M0X3/A STS analysis identified few elements with matched tasks recommended for proficiency code review. Table 18 is a sample of some of these elements recommended for review by training personnel to ensure proper proficiency coding.

Tasks not referenced to any element of the STS are listed at the end of the STS computer listing of the Training Extract. These tasks were reviewed to determine if there were any tasks concentrated around any particular function or job. There were 150 technical tasks with 20 percent or more of TAFMS group members performing and not matched to an STS element. These tasks were centered mainly around Duty E, Maintaining Launch Facility (LF) and Missile Alert Facility (MAF) Power Generation and Distribution Systems and Duty F, Maintaining LF and MAF Environmental Control Systems. Representative tasks from this list are displayed in Table 19.

TABLE 18

EXAMPLES OF TECHNICAL TASKS PERFORMED BY AFSC 2M0X3/A GROUP MEMBERS
SUGGESTED FOR PROFICIENCY CODE REVIEW TO PERFORMANCE CODING
(PERCENT MEMBERS PERFORMING)

TASKS		TNG EMP	PERCENT MEMBERS PERFORMING				TASK DIFF	ATI	
			3-SKL LVL (N=69)		5-SKL LVL (N=177)				7-SKL LVL (N=82)
16a	LF/MAF diesel engines								
16a(2)	Engine lube oil systems								
16a(2d)	Repair	B - - -							
E0194	Adjust DEU lube oil system components		5.63	71	54	32	4.84	18	
E0208	Perform operational checkouts of EEU lube oil systems		5.50	84	54	32	4.53	18	
E0252	Remove or install DEU lube oil system components		5.47	61	52	30	4.69	18	
16c	LF and MAF environmental control systems								
16c(6)	Air Conditioning subsystem/controls/alarms								
16c(6c)	Repair	- B - -							
F0296	Adjust air-conditioning subsystem components, other than emergency systems		6.18	68	58	33	5.91	18	
F0315	Perform operational checkouts of air-conditioning subsystems or controls, other than emergency systems		6.55	77	54	29	5.52	18	
16d	LF waste disposal systems								
16d(1b)	Troubleshoot	b - - -							
A0109	Troubleshoot sump pumps		4.84	61	47	18	6.10	18	
16d(1c)	Repair	b - - -							
A0036	Perform operational checkouts of sump pumps		5.29	81	47	22	4.43	18	
A0085	Remove or install sump pump components		4.76	48	43	16	4.96	18	
A0086	Remove or install sump pumps		4.84	46	43	16	5.00	12	

* Mean TE Rating is 1.74, and the Standard Deviation is 2.08 (High TE = 3.82)

** Average TD Rating is 5.00

TABLE 19

EXAMPLES OF TECHNICAL TASKS PERFORMED BY 20 PERCENT OR MORE
GROUP MEMBERS AND NOT REFERENCED TO THE STS

TASKS	PERCENT MEMBERS PERFORMING					TNG EMP	TASK DIFF
	1ST JOB (N=37)	1ST		3-SKL			
		ENL (N=73)	ENL (N=69)	LVL (N=69)	LVL (N=69)		
E0185	46	59	55	55	5.95	5.68	
E0188	70	79	78	78	6.03	5.57	
E0189							
E0192	65	75	75	75	5.29	4.96	
E0196	65	75	74	74	5.53	4.91	
E0202	65	73	71	71	5.61	4.94	
E0203	62	75	74	74	6.24	5.58	
E0204	70	63	61	61	5.89	8.12	
E0210	86	86	84	84	5.87	4.43	
	84	84	83	83	5.71	4.74	
E0212	51	58	61	61	5.42	4.56	
F0298	51	68	65	65	5.66	5.32	
F0299	46	64	61	61	5.24	5.37	
F0300	49	66	64	64	5.55	5.39	
F0301	54	70	67	67	6.13	5.43	
F0314	59	70	70	70	5.53	7.35	
F0316	76	77	80	80	6.50	5.51	
F0337	54	51	55	55	5.34	5.46	

* Mean TE Rating is 1.74, and the Standard Deviation is 2.08 (High TE = 3.82)

** Average TD Rating is 5.00

JOB SATISFACTION ANALYSIS

An examination of the job satisfaction indicators of various groups can give career ladder managers a better understanding of some of the factors which may affect the job performance of airmen in the career ladder. Attitude questions covering job interest, perceived utilization of talents and training, sense of accomplishment from work, and reenlistment intentions were included in the survey booklet to provide indications of job satisfaction.

Table 20 presents job satisfaction data for AFSC 2M0X3/A TAFMS groups, together with TAFMS data for a comparative sample of Mission Equipment Management career ladders surveyed in 1997. First-enlistment personnel rated utilization of talents and sense of accomplishment gained from work higher than the comparative sample. They also have lower reenlistment intentions than the comparative sample. Second-enlistment personnel rated all areas slightly lower than the comparative sample. Career airmen (those over 8 years TAFMS), rated all areas lower than the comparative sample with the exception of reenlistment intentions, which they rated slightly higher.

Table 21 compares job satisfaction responses from this survey to the previous survey completed in 1996. First-enlistment personnel rated sense of accomplishment gained from work much higher than the previous survey, while perceived utilization of talents and utilization of training were rated slightly higher. Expressed job interest and reenlistment intentions are slightly lower than the previous survey. Second-enlistment personnel reflect little change in job satisfaction responses from the previous survey. Career airmen responded lower to each job satisfaction indicator than the previous survey.

In Table 22, a review of the job satisfaction ratings for the specialty jobs and clusters identified in this survey reveals very low satisfaction ratings for all areas among the Equipment Support Job and Maintenance Controller Cluster members. The only exception to these low ratings is the relatively high reenlistment intentions for the Maintenance Controller Job members versus the other jobs and clusters of the career ladder.

TABLE 20

COMPARISON OF JOB SATISFACTION INDICATORS BY TAFMS GROUPS
(PERCENT MEMBERS RESPONDING)

	1-48 MOS TAFMS		49-96 MOS TAFMS		97+ MOS TAFMS	
	1998 2M0X3/A (N=73)	COMP SAMPLE* (N=3,883)	1998 2M0X3/A (N=75)	COMP SAMPLE* (N=2,651)	1998 2M0X3/A (N=180)	COMP SAMPLE* (N=6,033)
<u>EXPRESSED JOB INTEREST:</u>						
INTERESTING	63	65	73	65	71	74
SO-SO	21	19	20	20	18	17
DULL	16	16	7	15	10	9
<u>PERCEIVED UTILIZATION OF TALENTS:</u>						
FAIRLY WELL TO PERFECTLY	76	72	79	75	79	83
LITTLE OR NOT AT ALL	24	28	21	25	21	17
<u>PERCEIVED UTILIZATION OF TRAINING:</u>						
FAIRLY WELL TO PERFECTLY	96	85	86	82	79	80
LITTLE OR NOT AT ALL	4	15	14	18	21	20
<u>SENSE OF ACCOMPLISHMENT GAINED FROM WORK:</u>						
SATISFIED	74	64	75	66	67	72
NEUTRAL	14	17	9	15	15	11
DISSATISFIED	12	19	16	19	17	17
<u>REENLISTMENT INTENTIONS:</u>						
YES, OR PROBABLY YES	47	52	67	66	73	71
NO, OR PROBABLY NO	53	48	33	34	11	8
PLAN TO RETIRE	0	0	0	0	16	21

* Comparative sample of Mission Equipment Management career ladders surveyed in 1997 include the 2A3X2A/B/C, 2A5X3A/B/C, 2A6X3, 2A6X5, 2A6X6, 2A7X1, 2A7X3, 2E1X1, 2E8X1, and 2W0X1 AFSCs.

TABLE 21

COMPARISON OF CURRENT SURVEY AND PREVIOUS SURVEY BY TAFMS GROUPS
(PERCENT MEMBERS RESPONDING)

	1-48 MOS TAFMS		49-96 MOS TAFMS		97+ MOS TAFMS	
	1998 2M0X3/A (N=73)	1996 2M0X3 (N=128)	1998 2M0X3/A (N=75)	1996 2M0X3 (N=89)	1998 2M0X3/A (N=180)	1996 2M0X3 (N=151)
EXPRESSED JOB INTEREST:						
INTERESTING	63	66	73	74	72	75
SO-SO	21	17	20	18	18	18
DULL	16	17	7	8	10	7
PERCEIVED UTILIZATION OF TALENTS:						
FAIRLY WELL TO PERFECTLY	76	73	79	87	79	84
LITTLE OR NOT AT ALL	24	27	21	13	21	16
PERCEIVED UTILIZATION OF TRAINING:						
FAIRLY WELL TO PERFECTLY	96	89	86	85	79	80
LITTLE OR NOT AT ALL	4	11	14	15	21	20
SENSE OF ACCOMPLISHMENT GAINED FROM WORK:						
SATISFIED	74	55	75	72	68	77
NEUTRAL	14	19	9	10	15	8
DISSATISFIED	12	26	16	18	17	15
REENLISTMENT INTENTIONS:						
YES, OR PROBABLY YES	47	52	67	67	73	80
NO, OR PROBABLY NO	53	48	33	33	11	5
PLAN TO RETIRE	0	0	0	0	16	15

TABLE 22

COMPARISON OF JOB SATISFACTION INDICATORS BY SPECIALTY JOBS
(PERCENT MEMBERS RESPONDING)

	Facilities Maint Cluster (ST033) (N=193)	Supv Cluster (ST018) (N=41)	PREL Job (ST092) (N=29)	Maint Controller Cluster (ST014) (N=18)	Instructor Job (ST048) (N=12)	Equip Support Job (ST047) (N=7)	QA Job (ST060) (N=5)
INTERESTING	68	86	87	56	83	43	80
SO-SO	21	12	10	22	0	29	20
DULL	11	2	3	22	17	29	0
PERCEIVED UTILIZATION OF TALENTS:							
FAIRLY WELL TO PERFECTLY	79	95	76	67	92	43	100
LITTLE OR NOT AT ALL	21	5	24	33	8	57	0
PERCEIVED UTILIZATION OF TRAINING:							
FAIRLY WELL TO PERFECTLY	90	88	100	61	92	0	100
LITTLE OR NOT AT ALL	10	12	0	39	8	100	0
SENSE OF ACCOMPLISHMENT GAINED FROM WORK:							
SATISFIED	72	71	76	67	83	57	80
NEUTRAL	12	17	14	0	0	29	20
DISSATISFIED	16	12	10	33	17	14	0
REENLISTMENT INTENTIONS:							
YES, OR PROBABLY YES	66	58	62	72	100	57	80
NO, OR PROBABLY NO	29	15	38	11	0	43	0
WILL RETIRE	5	27	0	17	0	0	20

EXPRESSED JOB INTEREST:

INTERESTING
SO-SO
DULL

PERCEIVED UTILIZATION OF TALENTS:

FAIRLY WELL TO PERFECTLY
LITTLE OR NOT AT ALL

PERCEIVED UTILIZATION OF TRAINING:

FAIRLY WELL TO PERFECTLY
LITTLE OR NOT AT ALL

SENSE OF ACCOMPLISHMENT GAINED FROM WORK:

SATISFIED
NEUTRAL
DISSATISFIED

REENLISTMENT INTENTIONS:

YES, OR PROBABLY YES
NO, OR PROBABLY NO
WILL RETIRE

IMPLICATIONS

This survey was initiated to provide current job and task data for use in evaluating the AFMAN 36-2108 *Specialty Description* and appropriate training documents.

Survey results clearly indicate that the present classification structure, as described in the latest specialty description, accurately portrays the jobs performed in this career ladder. Based on survey data, the career ladder training documents require review to ensure inclusion of relevant elements. The career ladder progression is typical, with the move from technical work at the 3- and 5-skill levels to supervisory and management tasks at the 7-skill level. Job satisfaction is slightly higher for first-enlistment members and slightly lower for second-enlistment members than the comparative sample of like AFSCs, while slightly higher compared to the previous survey.

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX A

SELECTED REPRESENTATIVE TASKS PERFORMED BY SPECIALTY JOB GROUPS

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE A1

Facilities Maintenance Cluster (ST033)

REPRESENTATIVE TASKS		PERCENT MEMBERS PERFORMING
E0209	Perform operational checkouts of DEU safety and alarm devices	93
E0204	Perform operational checkouts of DEU battery chargers	93
E0201	Perform manual mode operations of DEUs	92
E0205	Perform operational checkouts of DEU cooling systems	92
E0206	Perform operational checkouts of DEU fuel oil systems	92
E0208	Perform operational checkouts of DEU lube oil systems	91
F0317	Perform operational checkouts of brine chiller control subsystems	91
E0210	Perform operational checkouts of DEU starting and stopping devices	90
F0297	Adjust brine chiller components	90
E0207	Perform operational checkouts of DEU generator control panels	90
A0027	Perform minor repairs, such as splicing wires, soldering, or tightening parts	89
F0296	Adjust air-conditioning subsystem components, other than emergency systems	89
F0347	Perform startups and checkouts of ECSs	89
F0315	Perform operational checkouts of air-conditioning subsystems or controls, other than emergency systems	89
F0316	Perform operational checkouts of alarm control panels or controls	89
E0269	Service DEU cooling systems	89
E0195	Adjust DEU safety and alarm device components	89
F0301	Adjust ECS flow alarms	89
F0302	Adjust ECS pneumatic electrical switches	88
F0320	Perform operational checkouts of instrument air systems	88
E0191	Adjust DEU fuel oil system components	88
F0306	Adjust instrument air system components	88
F0310	Adjust ventilation subsystems or controls	88
F0372	Troubleshoot brine subsystems	88
F0309	Adjust refrigerant subsystem components	88
E0188	Adjust DEU air intake and exhaust system components, such as valve lash adjustment	88
F0313	Perform brine flow checks of MAFs	88
E0271	Service DEU lube oil systems	87
E0194	Adjust DEU lube oil system components	87
E0187	Adjust diesel engine unit (DEU) cooling system components	87
E0202	Perform MPP site interface checkouts	87
F0304	Adjust ECS thermostats	86
F0346	Perform shutdowns and checkouts of ECSs	86
F0371	Troubleshoot brine chiller control panels or subsystems	86
E0196	Adjust DEU starting and stopping device components	86
F0384	Troubleshoot ventilation subsystems or controls	86
E0193	Adjust DEU governor components	86
F0298	Adjust ECS damper operators	86
E0236	Perform prestart checks of DEUs	85
E0294	Verify main fuel tank levels	85
F0305	Adjust heating subsystems or controls	85
E0192	Adjust DEU generator control panel components	85

TABLE A2

Supervision Cluster (ST018)

REPRESENTATIVE TASKS		PERCENT MEMBERS PERFORMING
P0940	Evaluate personnel for compliance with performance standards	80
P0947	Interpret policies, directives, or procedures for subordinates	78
P0958	Write or indorse military performance reports	76
P0923	Counsel subordinates concerning personal matters	76
P0925	Determine or establish work assignments or priorities	76
P0936	Establish performance standards for subordinates	73
P0920	Conduct supervisory performance feedback sessions	71
P0918	Conduct self-inspections or self-assessments	71
P0941	Evaluate personnel for promotion, demotion, reclassification, or special awards	66
P0946	Inspect personnel for compliance with military standards	66
P0959	Write recommendations for awards or decorations	66
P0931	Develop or establish work schedules	63
P0921	Conduct safety inspections of equipment or facilities	63
P0942	Evaluate maintenance or utilization of equipment, tools, parts, supplies, or workspace	61
P0939	Evaluate job hazards or compliance with Air Force Occupational Safety and Health (AFOSH) program	61
P0915	Assign personnel to work areas or duty positions	61
P0938	Evaluate inspection report findings or inspection procedures	59
P0917	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	59
P0953	Schedule personnel for temporary duty (TDY) assignments, leaves, or passes	59
P0924	Determine or establish logistics requirements, such as personnel, equipment, tools, parts, supplies, or workspace	56
P0960	Write replies to inspection reports	54
S1001	Evaluate serviceability of equipment, tools, parts, or supplies	46
P0943	Implement safety or security programs	46
P0954	Write inspection reports	41
R0997	Review TO changes	41
Q0974	Evaluate effectiveness of training programs, plans, or procedures	41

TABLE A3

Power, Refrigeration, and Electric (PREL) Job (ST092)

REPRESENTATIVE TASKS		PERCENT MEMBERS PERFORMING
		100
G0421	Perform operational checkouts of PT APUs	100
G0422	Perform operational checkouts of PT ECSs	100
G0425	Perform operational checkouts of PT security systems	100
G0423	Perform operational checkouts of PT electrical systems	100
G0442	Perform periodic inspections of PT ECSs	100
G0445	Perform periodic inspections of PT security systems	100
G0443	Perform periodic inspections of PT electrical systems	100
G0496	Troubleshoot PT APUs	100
G0499	Troubleshoot PT hoists	100
G0418	Perform operational checkouts of PMT van ECSs	100
G0497	Troubleshoot PT ECSs	100
G0439	Perform periodic inspections of PMT van electrical systems	100
G0417	Perform operational checkouts of PMT van APUs	100
G0438	Perform periodic inspections of PMT van ECSs	100
G0437	Perform periodic inspections of PMT van APUs	100
G0500	Troubleshoot PT security systems	100
G0498	Troubleshoot PT electrical systems	100
G0493	Troubleshoot PMT van ECSs	100
G0494	Troubleshoot PMT van electrical systems	97
G0424	Perform operational checkouts of PT hoists	97
G0441	Perform periodic inspections of PT APUs	97
G0444	Perform periodic inspections of PT hoists	97
G0398	Adjust PT ECS components	97
G0396	Adjust PT APU components	97
G0397	Adjust PT APU components	97
G0419	Perform operational checkouts of PMT van electrical systems	97
G0449	Perform periodic inspections of TE ECSs	97
G0399	Adjust PT electrical system components	97
G0430	Perform operational checkouts of TE ECSs	97
G0448	Perform periodic inspections of TE APUs	97
G0404	Adjust transporter erector (TE) ECS components	97
G0401	Adjust PT security system components	97
G0395	Adjust PMT van electrical system components	97
G0394	Adjust PMT van ECS components	97
G0406	Adjust TE semitrailer electrical system components	97
G0393	Adjust PMT van APU components	97
G0492	Troubleshoot PMT van APUs	97
G0464	Remove or install PMT van APU components	93
B0121	Perform operational checkouts of G and C chiller units	93
A0002	Adjust Minuteman elevator workcage components	93
G0400	Adjust PT hoist components	93
A0015	Inspect payload transporter (PT) security batteries	93
G0452	Perform periodic inspections of TE semitrailer electrical systems	93

TABLE A4

Maintenance Controller Cluster (ST014)

REPRESENTATIVE TASKS		PERCENT MEMBERS PERFORMING
H0552	Participate in scheduling meetings	94
H0518	Conduct or participate in status meetings	72
H0563	Provide award fee inputs	72
H0539	Operate facilities communications equipment	67
H0540	Operate portable radio equipment	67
H0541	Participate in contract design reviews	67
H0553	Participate in systems working group meetings	67
H0538	Operate computers or local area networks (LANs)	61
H0513	Complete daily activity log entries	61
H0517	Conduct or participate in readiness reviews	61
H0509	Approve procedural changes or deviations	61
H0510	Brief daily operations status	56
H0556	Perform fire, emergency, or natural disaster procedures	56
H0564	Provide inputs to launch countdown personnel during launch countdowns or simulated countdowns	56
L0727	Direct and control processing facility or launch complex modifications	56
H0531	Direct and control contract surveillance for launch base services (LBSs), such as custodial or refuse collection	56
H0560	Perform pad controller duties	50
L0722	Direct and control postlaunch damage assessment of launch complexes	50
L0707	Direct and control launch complex postlaunch securings	50
H0533	Evaluate contractor support	50
L0729	Perform postlaunch damage assessment of launch complexes	44
L0723	Direct and control postlaunch refurbishment of launch complexes	44
L0717	Direct and control mobile service tower (MST) operations	44
L0728	Direct and control water deluge system checkouts	44
P0921	Conduct safety inspections of equipment or facilities	39
H0526	Direct and control compliance with launch operations requirements documents (LORDs)	39
H0568	Review operations documents or procedures	39
H0524	Direct and control compliance with engineering documents	33
H0562	Plot and coordinate weather advisories	17

TABLE A5

Instructor Job (ST048)

REPRESENTATIVE TASKS		PERCENT MEMBERS PERFORMING
Q0964	Conduct formal course classroom training	100
Q0961	Administer or score tests	92
Q0976	Inspect training materials or aids for operation or suitability	92
Q0977	Maintain training records or files	92
Q0971	Develop or procure training materials or aids	92
Q0969	Develop training programs, plans, or procedures	92
Q0978	Personalize lesson plans	83
Q0975	Evaluate progress of trainees	83
Q0966	Counsel trainees on training progress	83
Q0970	Develop written tests	83
Q0968	Develop formal course curricula, plans of instruction (POIs), or specialty training standards (STSs)	83
Q0962	Brief personnel concerning training programs or matters	58
Q0967	Determine training requirements	58
Q0972	Establish or maintain study reference files	50
Q0963	Complete student entry or withdrawal forms	50
Q0973	Evaluate training methods or techniques of instructors	42
Q0974	Evaluate effectiveness of training programs, plans, or procedures	33
Q0980	Write training reports	33
A0017	Maintain handtools or tool boxes	33
Q0965	Conduct on-the-job training (OJT)	25
P0920	Conduct supervisory performance feedback sessions	25
P0928	Develop self-inspection or self-assessment program checklists	25
S1004	Inventory equipment, tools, parts, or supplies	25
P0918	Conduct self-inspections or self-assessments	25
P0930	Develop or establish work methods or procedures	17
R0997	Review TO changes	17
R0994	Maintain or update status indicators, such as boards, graphs, or charts	8
R0993	Maintain TO libraries	8

TABLE A6

Equipment Support Job (ST047)

REPRESENTATIVE TASKS		PERCENT MEMBERS PERFORMING
A0017	Maintain handtools or tool boxes	100
S1004	Inventory equipment, tools, parts, or supplies	100
S1005	Issue or log turn-ins of equipment, tools, parts, or supplies	100
S1001	Evaluate serviceability of equipment, tools, parts, or supplies	86
S1003	Initiate requisitions for equipment, tools, parts, or supplies	86
S1007	Maintain organizational equipment or supply records	86
S1002	Identify and report equipment or supply problems	86
S1006	Maintain documentation on items requiring periodic inspections or calibrations	86
A0013	Dispose of waste oil	71
S1000	Develop equipment checklists	71
P0921	Conduct safety inspections of equipment or facilities	57
P0937	Establish procedures for accountability of equipment, tools, parts, or supplies	57
P0918	Conduct self-inspections or self-assessments	57
P0930	Develop or establish work methods or procedures	57
P0942	Evaluate maintenance or utilization of equipment, tools, parts, supplies, or workspace	43
A0027	Perform minor repairs, such as splicing wires, soldering, or tightening parts	43
P0923	Counsel subordinates concerning personal matters	43
P0943	Implement safety or security programs	29
S0999	Coordinate maintenance of equipment with appropriate agencies	29
G0434	Perform operator maintenance on support vehicles	29
P0925	Determine or establish work assignments or priorities	29
P0924	Determine or establish logistics requirements, such as personnel, equipment, tools, parts, supplies, or workspace	29
A0062	Raise or lower equipment by hand	14
R0994	Maintain or update status indicators, such as boards, graphs, or charts	14
O0846	Clean work areas	14
R0990	Maintain administrative files	14
A0002	Adjust Minuteman elevator workcage components	14
Q0965	Conduct on-the-job training (OJT)	14

TABLE A7

Quality Assurance (QA) Job (ST060)

REPRESENTATIVE TASKS		PERCENT MEMBERS PERFORMING
P0939	Evaluate job hazards or compliance with Air Force Occupational Safety and Health (AFOSH) program	100
P0954	Write inspection reports	100
P0940	Evaluate personnel for compliance with performance standards	100
P0938	Evaluate inspection report findings or inspection procedures	100
P0947	Interpret policies, directives, or procedures for subordinates	80
P0942	Evaluate maintenance or utilization of equipment, tools, parts, supplies, or workspace	80
P0919	Conduct staff assistance visits, inspections, or audits	80
P0921	Conduct safety inspections of equipment or facilities	80
Q0974	Evaluate effectiveness of training programs, plans, or procedures	80
R0997	Review TO changes	60
R0998	Write minutes of briefings, conferences, or meetings	60
P0918	Conduct self-inspections or self-assessments	60
Q0976	Inspect training materials or aids for operation or suitability	60
Q0973	Evaluate training methods or techniques of instructors	60
P0928	Develop self-inspection or self-assessment program checklists	60
P0952	Review drafts of supplements or changes to directives, such as policy directives, instructions, or manuals	40
P0946	Inspect personnel for compliance with military standards	40
P0934	Draft supplements or changes to directives, such as policy directives, instructions, or manuals	40
P0917	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	40
S1001	Evaluate serviceability of equipment, tools, parts, or supplies	40
R0995	Participate in TCTO meetings	40
P0945	Initiate actions required due to substandard performance of personnel	20
P0941	Evaluate personnel for promotion, demotion, reclassification, or special awards	20

THIS PAGE INTENTIONALLY LEFT BLANK